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ABSTRACT

The manual explains the use of the Gifted Science Project Resource File. The file is designed to identify science resources for third through eighth grade gifted students and their teachers. The resources are matched with the objectives of the Montgomery County (MD) schools "Program of Studies." Sections outline the project calendar, list the participating schools, describe the format of the resource file, and outline steps in the use of the file (such as selection of students and student science interest). Examples illustrate how to select a resource and arrange for its use by a student. Samples of the evaluation reports and project letters are appended. (PHR)

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GIFTED SCIENCE PROJECT
IN-SERVICE MANUAL

ESEA Title IV-C:
A Supplementary Education Service for Gifted Students and Their Teachers - Science

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INFORMATION CENTER (ERIC)."

SECOND TRYOUT EDITION

MONTGOMERY COUNTY PUBLIC SCHOOLS
Rockville, Maryland

SEPTEMBER 1979

EC 130/25

PREFACE

The purpose of this manual is to present an explanation of the Gifted Science Project services and the procedures a teacher will follow when using the Project Resource File. A brief history of the project is included.

This manual was used with tryout schools during the 1979 - 1980 school year and reflects changes suggested from the initial tryout in the spring of 1979. This manual will be revised and issued in a final edition prior to county-wide implementation in September 1980.

It is hoped that this manual will serve as a model for a replication of the project in other school districts and that procedures described might suggest projects in other disciplines and for other student populations.

For further information, contact

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PROJECT STAFF AND RESPONSIBILITIES

Project staff members should be called to come to the school and help teachers and other school personnel use the Project Resource File and to complete project reports. This includes helping teachers to identify appropriate resources in the Project Resource File, locate references for students, and make telephone calls to organizations and resource persons outside the school. Any staff member will help to answer questions, supply information, or direct a message to the proper person.

The Gifted Science Project office hours are 8:30 a.m. to 5:00 p.m. The clerk-typist is in the project office from 8:30 a.m. to 12:30 p.m. The project telephone is 279-3500 and Dr. Pancella can be reached at 279-3421.

Listed below are the project staff and their responsibilities.

John R. Pancella, Ed.D., Coordinator, Secondary Science and Project Director
Dr. Pancella manages the project. He handles administrative procedures and serves as a liaison between outside agencies and Montgomery County Public Schools regarding the project.

Susan L. Ott, Evaluation Specialist
Ms. Ott conducts project evaluation studies. This includes the collection and analysis of data and the preparation of reports concerning the status and success of the project tryout.

Michael E. Lawson, Media Specialist
Mr. Lawson prepares resource file sheets for production of the Project Resource File microfiche. He serves as a liaison between the project staff and the tryout school media specialists.

Gerard F. Consuegra, Science Specialist
Mr. Consuegra helps teachers identify eligible students for the project and assists teachers in matching student interests to science topics, objectives, and resource categories.

Peg Fagley, Clerk-Typist
Mrs. Fagley types and mails evaluation reports. She also takes messages for the project staff and maintains staff calendars.

PROJECT OVERVIEW

The Gifted Science Project is federally funded under ESEA, Title IV-C. The product is to identify science resources for individual gifted students and their teachers, Grades 3-8.

The resources are matched with objectives and topics in the Montgomery County Public Schools (MCPS) Program of Studies. They include information on scientists, scientific agencies and laboratories, published materials, and special activities such as lectures and seminars. More than 400 different resources are organized and presented in the Project Resource File. *There is no curriculum development associated with the project.*

Teachers are encouraged to use the Project Resource File as often as possible. It can help conserve teacher time since the project staff has identified print and non-print materials and located individuals and organizations who have given commitments to assist individual students.

PROJECT CALENDAR

Three-Year Calendar

The project is planned for three years of funding. During the first year, 1977-78, the staff collected, organized, and classified science resources. These resources were correlated with MCPS science instructional objectives. The resources were placed in a microfiche (a form of microfilm) retrieval system. During the second and third years, 1978-80, the system has been installed on a trial basis in 15 public schools and one Catholic school. Prior to the tryout, the project staff showed teachers and other staff how to use the Project Resource File. During the tryout, evaluation studies are being conducted and the data will be used to revise the project materials.

At the conclusion of the third year of the project, 1979-80, the Project Resource File will be made available countywide, and sample project materials will be prepared for dissemination to interested persons.

Tryout Calendar

The first half of the tryout period was March through June 1979. The project staff revised and updated the project materials during the summer, 1979. The last part of the tryout will be from September 1979 through January 1980. The project staff will then prepare all the data for evaluating the project, complete a final revision of the project materials, disseminate information on the project, and prepare the Project Resource File for countywide implementation beginning September 1980. Teachers may continue to use the project materials during the period between the end of the tryout and the countywide implementation, January to September 1980. Data will not be collected after January 1980.

PROJECT TRYOUT SCHOOLS

The project tryout is being conducted in two elementary schools and one junior high school in each administrative area of Montgomery County Public Schools and in one Montgomery County Catholic School.

Montgomery County Public Schools

<u>School</u>	<u>Principal</u>	<u>Area</u>
Argyle Junior High School 460-1300	Mr. Lewis A. Jones	2
Benjamin Banneker Junior High School 384-8800	Ms. Dianne G. Pemble	4
Beverly Farms Elementary School 469-7888	Miss Dorothy Stackhouse	3
Cashell Elementary School 924-4502	Mr. Joseph M. Viqueira	4
Cresthaven Elementary School 439-2410	Mrs. M. Kelly Guido	2
Germantown Elementary School 972-1282	Mr. David G. Vader	5
Grosvenor Elementary School 530-2141	Miss Katherine Patterson	1
Mill Creek Towne Elementary School 948-2770	Mrs. Marie G. Heck	4
Piney Branch Elementary School 270-9363	Dr. Albert J. Bidwick, Jr.	2
Potomac Elementary School 299-8144	Mr. Walter L. Tozier	3
Ridgeview Junior High School 926-6600	Dr. Arnold J. Rosenberg	5
Tilden Junior High School 881-3950	Mr. Arch W. Webster	3
Westbrook Elementary School 229-7292	Mr. James W. Connor	1
Western Junior High School 320-3366	Mr. William H. Snyder	1
Whetstone Elementary School 948-6194	Mr. Neil J. Shipman	5

Montgomery County Catholic School

Little Flower School 320-3273	Sister Nancy Marie Elder
----------------------------------	--------------------------

Beginning on page 4 and continuing to the end of the manual, the narrative on each right-hand page describes or is related to an illustration or exhibit on each left-hand page. When useful, large circled numbers, e.g., **4**, are used to match the narrative on the right-hand page with an appropriate item or section of the illustration on the left-hand page.

ESEA TITLE IV - C 1979 - 80
GIFTED SCIENCE PROJECT

GRADE: 5
TOPIC: UNIVERSE IN
CHANGE

FICHE 35



FORMAT OF THE PROJECT RESOURCE FILE

The resources in the Project Resource File have been reproduced on microfiche (a form of microfilm). An actual-size representation of a microfiche is illustrated. By reducing an 8½" x 11" page of paper many times, it is possible to place 98 pages on one microfiche. The current cost of microfiche reproduction is 12 cents per fiche; this is a considerable savings over other forms of reproduction. In addition to this savings, microfiche provides a convenient and space-saving format for storing and retrieving information.

In the Project Resource File and throughout this in-service manual, microfiche is abbreviated as "fiche."



PREPARING TO USE THE PROJECT RESOURCE FILE

Introduction

To prepare to use the Project Resource File, the teacher should

1. identify eligible students,
2. determine and classify the student's science interests (call the project staff for assistance),
3. select appropriate resource categories (call the project staff for assistance),
4. obtain a STUDENT ENVELOPE for the identified student, and
5. review the steps in the TEACHER CHECKLIST (call the project staff for assistance).

An explanation of each of the above items appears on pages 8 - 17.

Adopted by the Board of Education November 22, 1978

a policy statement on

Education of Gifted and Talented Students

POLICY

I. CONDITION

The Montgomery County Board of Education has determined that instruction of gifted and talented students shall be identified as a priority area of concern and that appropriate steps shall be taken to continue to develop systemwide plans that assure provisions for the gifted and talented in each school. Students who are gifted have unique educational needs that should be met if these students are to achieve their full potential.

Montgomery County Public Schools provides a number of differentiated educational programs and services beyond those normally provided in the general school population; however, appropriate differentiated programs and/or services are not currently available for all Montgomery County Public Schools and talented students. The purpose of these programs is to assist students in realizing their contribution to themselves and to society. Program refers to the systematic delivery of instruction and services, implementation plan, identification and selection procedures, curriculum and resources, staff selection and training, and evaluation.

Gifted and talented students are those who by virtue of outstanding abilities, are capable of high performance. These are students who require differentiated educational programs and services in order to realize their contribution to self and to society. Students capable of high performance include those who have demonstrated achievement in one or more of the following areas: single or multiple areas of intellectual ability, general academic achievement, creative or artistic ability, leadership ability, or potential ability.

II. PURPOSE

The purpose of this policy is to continue to ensure that Montgomery County Public Schools provide a program of appropriate qualitatively differentiated instruction K-12 and in all subject areas to meet the unique needs of gifted and talented students. The following provisions will be made as gifted and talented programs are to be developed and implemented.

1. Identification procedures for all Montgomery County public school students who are gifted and/or talented in any one or combination of the six categories of giftedness in any subject area K-12, will be developed, implemented, and evaluated.
2. Curriculum and other resources that will meet the needs of identified gifted and talented students will be identified, developed, evaluated, disseminated, and revised. These processes shall be continuous.

3. A variety of organizational options at the district, school, and central level, across all grades, will be developed and systematically evaluated to provide an appropriate and effective experience for identified gifted and talented students.
4. Selection of staff and personnel for gifted and talented programs will be based on the education and experience of the personnel involved and upon the awareness and understanding of the needs of gifted and talented students.

Identify Eligible Students

The Gifted Science Project supports A Policy Statement on Education of Gifted and Talented Students adopted by the Board of Education on November 22, 1978.

"Procedures for Selection of Elementary Students to Participate in Gifted and Talented Programs" and "Procedures for Selection of Secondary Students to Participate in Gifted and Talented Programs" have been distributed to all schools by the Department of Instructional Planning and Development. The identification procedures should be used to identify students for the Gifted Science Project.

Science Topics by Grade Levels

<u>Grades 3-6</u>	<u>Grade 7</u>	<u>Grade 8</u>
Energy	---	Energy
Lab Skills - Nature of Science	Lab Skills - Nature of Science	Lab Skills - Nature of Science
Living Things	Living Things	--- *
Living Things - Environment	Living Things - Environment	--- *
Matter	--- *	Matter
Universe in Change	--- *	Universe in Change

* The MCPS Program of Studies for Grade 7 includes life science topics only, and Grade 8 includes earth and physical science topics only.

Determine a Student's Science Interest

Once the teacher has determined that a gifted science student might benefit from the project, the student should be interviewed in order to determine his or her specific science interests. The teacher then selects one or more of the science topics, within the student's grade level, which best match the student's science interests.

For further reference, the teacher will find it helpful to write the science topic(s) selected and the specific science interests on a sheet of paper. This sheet of paper can be filed in the STUDENT ENVELOPE which will be described on page 15.

If there are any questions about the nature of the topics in a grade level, project staff will help clarify the match of topics with a student's interest(s).

RESOURCE CATEGORIES AND EXAMPLES

1. Activities— demonstrations, investigations, or experiments which are identified and supervised by resource persons and which support selected topics and objectives.

Example: The student will help a forester conduct an inventory of woodland plants and environmental conditions in a forest environment.

2. Awards and Competitions— recognition which is earned by developing and presenting a science project or paper.

Example: The student will participate in the Montgomery Area Science Fair.

3. Career Information— resource persons or published materials which describe science or science-oriented jobs and careers.

Example: The student will use the book Veterinary Medicine and Animal Care Careers to learn about science careers.

4. Courses, Lectures, and Seminars— science programs sponsored by educational institutions or organizations.

Example: The student will attend a health seminar sponsored by the National Institutes of Health.

5. Libraries— specialized collections of science books or other science related media.

Example: The student will use the Meadowside Nature Center Library under the direction of a naturalist.

6. Mentors— resource persons discuss by telephone or in person science topics and objectives and might suggest reading material, ideas for further work, and other resources.

Example: The student will meet with a scientist from NASA and discuss the student's interests.

7. Project Ideas— published materials which describe science investigations for use by a student on an individual basis or with a resource person.

Example: The student will use the book Adventures in Electrochemistry to develop a science project.

8. Science Processes— published materials which describe science procedures and skills such as laboratory techniques; suggestions for science problem solving; and the collection, processing, analysis, and presentation of data.

Example: The student will use the book How to Make Your Science Project Scientific to develop science process skills.

9. Visits— behind-the-scenes tours not normally available to the public or public tours related to science topics and objectives.

Example: The student will take a tour of the University of Maryland Cyclotron.

Select the Appropriate Resource Category

Resources in the Project Resource File are classified into nine resource categories. These resource categories are listed and defined on the left-hand page. An example of each is also provided. Examination of the Project Resource File will reveal that all the categories are not represented in each topic at each grade level.

The teacher should select resource categories based upon the student's needs and preferences. Consideration should be given to the availability of student transportation. If this is a problem, the teacher should search for resources that do not require transportation. Resource categories which generally require transportation are Activities; Courses, Lectures, and Seminars; Libraries; Mentors; and Visits. Resource categories which generally do not require transportation are Awards and Competitions, Career Information, Project Ideas, and Science Processes.

A judicious selection of resource categories by the teacher will save time and reduce the need to return to the Project Resource File.

STUDENT ENVELOPE
Gifted Science Project
Montgomery County Public Schools
Rockville, Maryland

①

Student _____
Last First Middle

Teacher _____
Last First Middle

School _____

CONTENTS

②

- TEACHER CHECKLIST
- REPORT NO. 1 TEACHER NOTES (5)
- REPORT NO. 2 PRIOR EXPERIENCES (1)
- RETURN ADDRESSED ENVELOPES (5)
(GET ADDITIONAL RETURN ENVELOPES
FROM THE MEDIA SPECIALIST)

NOTE: Use this envelope to keep
additional reports and notes of the
student's use of project resources.

2/79

Obtain a STUDENT ENVELOPE

Since the Project Resource File and project materials are located in the school's media center, the teacher should ask the media specialist for a STUDENT ENVELOPE. The purpose of this envelope is to provide a place for keeping project materials for the student. The teacher must use a separate envelope for each student who will use project resources.

The labeled side of the STUDENT ENVELOPE is illustrated ^①. The teacher should provide the requested information on the STUDENT ENVELOPE.

The teacher should check the contents of the STUDENT ENVELOPE ^② for missing items. Missing items or additional copies of an item can be obtained from the school media specialist.

The teacher should return the STUDENT ENVELOPE to the media specialist at the conclusion of the tryout period, September 1979 through January 1980. At that time the project staff will review each STUDENT ENVELOPE at the school. Each envelope will be left at the school as a part of the student's record and for use by subsequent teachers of the student.

TEACHER CHECKLIST

Purpose: *This is for the teacher's use only.* It will help the teacher use Gifted Science Project (GSP) materials.

Directions: Mark each task as it is completed. Keep this checklist in the STUDENT ENVELOPE as a reminder of the steps that have been completed and those that need to be finished. If help is needed, consult the school media specialist or call the GSP office at 279-3500 between 8:30 a.m. and 5:00 p.m. The best time to call is between 8:30 a.m. and 12:30 p.m. when part-time clerical staff are present. Call at other times and leave a message if project staff are out of the office.

Student _____ Date _____

Teacher _____ School _____

- ☐ 1. Print the identification information on the STUDENT ENVELOPE.
- ☐ 2. Select the resource(s) from the Project Resource File and use REPORT NO. 1 TEACHER NOTES.
- ☐ 3. Arrange for the student to use the resource(s).
 - ☐ A. *For published materials*, obtain the materials and give them to the student.

OR

- ☐ B. *For resources outside the school*, the following sequence is recommended:
 - 1) Contact the parent(s)
 - 2) Discuss the resource(s) with the student
 - 3) Contact the resource person and make the arrangements
 - 4) Notify the parent(s) and the student of the arrangements
- ☐ 4. Complete the bottom portion of REPORT NO. 1 TEACHER NOTES and distribute the copies as directed.
- ☐ 5. Complete REPORT NO. 2 PRIOR EXPERIENCES and distribute the copies as directed.
- ☐ 6. Complete and return REPORT NO. 3 TEACHER FEEDBACK, if appropriate.
- ☐ 7. Have the student complete REPORT NO. 4 STUDENT FEEDBACK and return it to the GSP office.

At the end of the semester you will be asked to complete and return REPORT NO. 5 SUMMARY COMMENTS.

Review the TEACHER CHECKLIST

A copy of the TEACHER CHECKLIST is located in the STUDENT ENVELOPE. The teacher should read this sheet carefully before using the Project Resource File.

This checklist will be a guide for the teacher to follow when using the Project Resource File.

The first step in the TEACHER CHECKLIST is complete when the identification information is printed on the front of the STUDENT ENVELOPE.

**ESEA TITLE IV - C 1979 - 80
GIFTED SCIENCE PROJECT**

**GRADE: 5
TOPIC: UNIVERSE IN
CHANGE**

FICHE 35

1

2

3

HOW TO SELECT A RESOURCE AND ARRANGE
FOR ITS USE BY A STUDENT

Introduction

The two examples in this section illustrate how a teacher selects and obtains a resource from the Project Resource File and arranges for the student to use the resource. The project staff is committed to helping facilitate the use of project materials in any way possible. Please call the project office and request assistance in completing any or all of the procedures described in this section.

In the first example, the student is a fifth grader who wants to learn about scientists who study volcanoes. The teacher discusses this with the student and identifies the resource category as CAREER INFORMATION. In the second example, the same student wants to learn how a volcano forms and how to build volcano models. The student has already looked at several books and would like to talk to a volcano expert. For this example, the teacher identifies the resource category as MENTOR. For both examples, the topic is Universe in Change.

Now the teacher is ready to use the Project Resource File. The teacher requests the Grade 5, UNIVERSE IN CHANGE fiche from the media specialist and uses the microfiche reader. The teacher should locate the desired resource category and search the descriptions for an appropriate resource. The resource categories are found in the first column on the fiche (1). The category CAREER INFORMATION is in the third row on the fiche (2), and the category MENTOR is in the sixth row (3).



Resource File No. 563001

GRADE: 5

TOPIC: UNIVERSE IN CHANGE

OBJECTIVE(S): 560-562

CATEGORY: CAREER INFORMATION

TITLE: WHAT DOES A GEOLOGIST DO?

AUTHOR: R.V. FODOR

PUBLISHER: DODD,

COPYRIGHT: 1977

PRICE: \$5.25

SER. NUMBER: 396-07

DESCRIPTION: THIS IS
GEOLOGICAL
A DISC
TECHNI
OF GEO
VOLCAN
CHRONO
EXPER
GIST,
SEISMO
AN IND

TEACHER NOTES

Serialized by: Teacher
Reviewed information on resources collected
Dissemination: Gifted Science Project office and STUDENT ENVELOPE

Directions: See the printed information on the back of the yellow copy.

A. Student Thomas Michelle A Grade 5
(Last) (First) (Middle)

Teacher West Robert J. School Central Elementary School
(Last) (First) (Middle)

B. Resource File No.: 563001 Viches: 35 Page: 17

CONTACT or TITLE: What Does A Geologist Do?ADDRESS or AUTHOR: R. V. FodorTELEPHONE: - HOURS: -

C. Notes

*This book was loaned to Michelle by
the school media specialist.*

D. Mark the box of the statement which applies:

- ☒ The resource will be used by the student. (Complete sections E and F and distribute copies as directed below.)
- ☐ No attempt was made to use the resource. (File both copies of this report in the STUDENT ENVELOPE and DO NOT send the white copy to the Gifted Science Project office.)
- ☐ An attempt was made to use the resource. However, it could not be arranged. (Please explain below, then file both copies of this report in the STUDENT ENVELOPE and DO NOT send the white copy to the Gifted Science Project office.)

E. Expected starting date: October 18, 1979 Estimated completion date: October 30, 1979

F. Who will work directly with the student?

- ☒ Teacher ☐ Person other than CONTACT shown above.
☐ Media specialist Give name _____
☐ CONTACT shown above ☐ Do not know

DISTRIBUTION: White/Gifted Science Project office; Yellow/STUDENT ENVELOPE

GSP REPORT NO. 1

1/79

First Example

The teacher has selected the book entitled What Does a Geologist Do? (1)

Next, sections A and B of a TEACHER NOTES REPORT NO. 1 are completed (2). Information for section B (3) is found on the Project Resource File resource description sheet.

The teacher must now arrange for the student to obtain and use the resource. Since the selected resource is a book, the teacher should check the school's card catalog regarding its availability in the school's collection. If the book is not part of the school's collection, the teacher should ask the media specialist to attempt to obtain it from another library. If the media specialist is unable to obtain a copy of the book, the teacher might look at the Project Resource File again and try to find an alternate selection.

Assuming that the book, What Does a Geologist Do?, was found and given to the student, the teacher completes the remaining portion of the TEACHER NOTES REPORT NO. 1 as shown (4).

The two pages of the report should be separated. The white copy should be sent to the Gifted Science Project office, using a return envelope found in the STUDENT ENVELOPE. The yellow copy should be filed in the STUDENT ENVELOPE.

If the book could not be located, the teacher would record this fact in C and D and file both copies in the STUDENT ENVELOPE.

Insurance File No. 566006

GRADE: 5

TOPIC: UNIVERSE IN CHANGE

OBJECTIVE(S): 560 - 562

CATERPILLAR: MENTOR

CONTACT: MR. JERRY GOLDBERG

ADDRESSES: U.S. GEOLOGICAL SURVEY
GEOLOGIC DIVISION - MAIL STOP 953
12201 SUNRISE VALLEY DRIVE
RESTON, VA 22092

TELEPHONE: (703) 86

REPORT: 9:00 AM

TRACING NOTES

Classified by: Teacher
 Exemption Code: Exempt information on resources collected
 Distribution: G456d Science Project office and STIMULI INVELOPE

Directions: See the printed information on the back of the yellow copy.

A. Student Themes Michela A Grade 5
(Last) (First) (Middle)

Teacher West Robert J. School Central Elementary School
(Last) (First) (Middle)

B. Resource File No.: 566006 Fiche: 35 Page: 36

CONTACT OR TITLE: Mr. Terry Goldharg

ADDRESS OF AUTHOR: Geologic Division - Mail Stop 953; 12201 Sunrise Valley Dr;
Reston, Va. 22092
 TELEPHONE: (703) 860-631 HOURS: 9 am - 3:30 pm (Weekdays)

- C. Notes 11/6/79 Called parents and they agreed to take Michele to Reston the week of 11/19/79.
11/7/79 Michele said she would like to talk with Mr. Goldberg.
11/8/79 Mr. Goldberg said he would like Michele to meet with his assistant Ms. Joan Doe in his office. Her parents can visit the reception area and park in the visitor spaces. 3:30pm on 11/21/79.
11/9/79 Called Mr. Thomas to confirm 11/21 arrangements.

D. Mark the box of the statement which applies:

- ☒ The resource will be used by the student. (Complete sections E and F and distribute copies as directed below.)
- ☐ No attempt was made to use the resource. (File both copies of this report in the STUDENT ENVELOPE and DO NOT send the white copy to the Gifted Science Project office.)
- ☐ An attempt was made to use the resource. However, it could not be arranged. (Place no copies below, then file both copies of this report in the STUDENT ENVELOPE and DO NOT send the white copy to the Gifted Science Project office.)

E. Expected starting date: 11/21/79 Estimated completion date: 11/29/79

F. Who will work directly with the student?

- ☐ Teacher ☒ Person other than CONTACT shown above.
☐ Media specialist Give name Ms. Jess Doe
☐ CONTACT shown above ☐ Do not know

DISTRIBUTION: White/Gifted Science Project office; Yellow/STUDENT ENVELOPE

GSP REPORT NO. 1

1/79

Second Example

The teacher selected Mr. Jerry Goldberg as a possible resource
① . Next, sections A and B of a TEACHER NOTES REPORT NO. 1 are completed. Information for section B ② is found on the Project Resource File resource description sheet.

The teacher then contacts the parents and explains that a potential resource for the student has been located. The teacher gives the parents the details of the resource and determines whether they are willing to have the teacher make the arrangements. If the parents are amenable, the potential resource is discussed with the student. If the student wants to use the resource, the teacher should telephone the resource person and make tentative arrangements. The details of these contacts are recorded in section C ③ of the TEACHER NOTES REPORT NO. 1. Note that Mr. Goldberg will arrange for one of his colleagues, Ms. Joan Doe, to work with the student. The teacher records this information.

The teacher must now complete the remaining sections of TEACHER NOTES REPORT NO. 1 ④ .

The copies of this report are distributed as explained ⑤ .

If the resource was not used, the teacher would record this fact in C and D and file both copies in the STUDENT ENVELOPE.

PRIOR EXPERIENCES

Completed by: Teacher

Purpose: Identify student's prior science experiences

Distribution: Gifted Science Project office and STUDENT ENVELOPE

Directions: See the printed information on the back of the yellow copy.

Student Michele Thomas Grade 5 Report Date 11/12/79
Teacher Robert West School Central Elementary School

<u>Number of Experiences</u>	<u>Resource Category</u>	<u>Description</u>
<u> </u>	1. <u>Activity:</u>	
<u> </u>	2. <u>Award or Competition:</u>	
<u> 2 </u>	3. <u>Career Information:</u>	<i>The student used a book and spoke with a neighbor about her career goals.</i>
<u> </u>	4. <u>Course, Lecture, or Seminar:</u>	
<u> </u>	5. <u>Library:</u>	
<u> </u>	6. <u>Mentor:</u>	
<u> 2 </u>	7. <u>Project Ideas:</u>	<i>The student located two public library books and completed a project.</i>
<u> </u>	8. <u>Science Processes:</u>	
<u> 1 </u>	9. <u>Visit:</u>	<i>The student visited a science exhibit at a local museum.</i>

Other Science Activities

☐ (a) The student did not participate in any of the science activities listed above.

OR

☐ (b) The student participated in a science activity other than those described above. Description:

DISTRIBUTION: White/Gifted Science Project; Yellow/STUDENT ENVELOPE

Completing the PRIOR EXPERIENCES REPORT NO. 2

If the student uses a resource from the Project Resource File, the teacher must complete a PRIOR EXPERIENCES REPORT NO. 2. This report should be completed when the box, "The resource will be used by the student," is marked in part D of the TEACHER NOTES REPORT NO. 1. The PRIOR EXPERIENCES REPORT NO. 2 is not completed if either of the other two boxes are marked. The PRIOR EXPERIENCES REPORT NO. 2 is completed only once for each student.

This report is shown in a completed form for the student in the two examples described on pages 19-23. The specific directions are printed on the reverse side of the report and a copy of the entire report appears in APPENDIX A.

Only prior experiences that match the descriptions of the resource categories should be recorded. For example, a visit to a public museum, nature center, etc., is not recorded unless special arrangements were made to meet an individual student's need or the visit included something not normally available through a public tour.

Another example that is not recorded is an activity or project done in school as a part of regular instruction. Record only those done by a student on their own, for a science fair or display, or with a resource person such as a scientist, engineer, or medical doctor. Do record experiences in which a parent, relative, or neighbor is the resource person.

The two pages of the report should be separated. The white copy should be sent to the Gifted Science Project office, using the return envelope found in the STUDENT ENVELOPE. The yellow copy should be filed in the STUDENT ENVELOPE.

PROJECT REPORTS

There are eight different reports for collecting data to evaluate the project. All of the reports are brief. The teacher only completes a few of the reports and others are completed by the student, media specialist, or resource person.

The six reports used by a teacher, student, or school media specialist are shown on the left. Two other reports (not shown) are associated with the Gifted Science Project. These reports are used to collect data from resource persons outside the school. Examples of these two are shown in APPENDIX A.

DOs AND DON'Ts
FOR USING THE PROJECT RESOURCE FILE

Aspects of Using the
Project Resource File

DO

DON'T

**Selection of
Students**

- Select only bonafide gifted pupils.
If there is doubt regarding a student's ability, don't select the student.

- Compromise the use of resources by recommending unqualified students.
Resource persons expect highly academic and highly motivated students.

- Force a student to use a resource when he/she is not interested in the topic or the resource.

Project Procedures

- Follow all established project procedures.
- Complete and return all project reports promptly.
- Stay within grade level when choosing resources.
- Read the Project Resource File entry sheets carefully and observe the restrictions, procedures, and cautions which appear in the SPECIAL INSTRUCTIONS.
- Keep precise notes on each TEACHER NOTES REPORT NO. 1.
- Notify parents when a resource must be used away from the school.
- Involve the media specialist when locating published materials.
- Call the project staff when a problem develops which cannot be resolved at the local school level.

- Compromise project procedures by eliminating reports or short cutting steps outlined in the TEACHER CHECKLIST.
- Suggest or expect students or parents to make initial resource contacts.
- Remove the Project Resource File from the school media center.
- Compromise the Project Resource File by giving it to students or persons outside the teaching staff.

**Selection of
Resources**

- Carefully determine the student's specific science interests.
- Choose resources carefully. Consider the student's personality, background, strengths, and weaknesses.
- Expect an occasional delay when arranging the use of a resource.

- Pursue excessive numbers or resources at one time.

**Relations with
Resource Persons**

- Honor appointments and arrangements with outside resources.
- Notify the resource as soon as possible if it is necessary to cancel a student's appointment.

- Pass on discipline problems to resource persons.
- Expect resource persons to work with students other than on an individual basis.
- Publicize the information and services described in the Project Resource File.
- Share the personal references with anyone other than staff, teachers, and students in tryout schools.

DOs and DON'Ts FOR USING THE PROJECT RESOURCE FILE

This chart presents suggestions for using the Project Resource File and is intended to reduce problems that might arise during the project tryout. The staff is attempting to reduce as many variables as possible that could affect three important project objectives:

1. to develop a practical resource file,
2. to develop procedures for using the resource file,
and
3. to evaluate the project's materials and services in accordance with the project staff's obligation for receiving a federal-state grant.

Particular attention must be given to the agreements the project staff made with resource persons outside the school. These persons have agreed to offer only the services described in the Project Resource File and only for the tryout schools. Any compromise of these agreements may result in losing a valuable resource from the project tryout and probably from the countywide implementation in 1980-81. We wish to have the closest control possible over the variables affecting the success of the project in order to conduct the best possible evaluation of the project.

The cooperation and patience of all persons involved will be greatly appreciated.

APPENDIX A contains a sample of
each evaluation report used during the tryout.

APPENDIX A

PROJECT EVALUATION REPORTS

TEACHER NOTES

PRIOR EXPERIENCES

Purpose: This report will be used by a teacher to provide information on the nature of the [redacted]

TRACKER FEEDBACK

Summary by: Tashov
Subject: Describe the applicant's experience with a consumer
Classification: Gifted Science Section office

STUDENT FEEDBACK

Teacher	Supervised by	Student
Room	Blk	

SUMMARY CLIPARTS

MEDIA SPECIALIST FEEDBACK

NAME	MEDIA SPECIALIST FEEDBACK
DATE	
TOUCH	Comments by: Media Specialist Explain: Describe use of and recommendations for improving the project products and services
DATE	Distribution: Gifted Science Project office
Notes	

Media Specialist _____ School _____

Part
Level
of the

This report will provide an anecdotal record of the use of the Project Resource File in your school.

I. STUDENT ENVELOPE Log

Directions: Each time a teacher is issued a STUDENT ENVELOPE, record the information below. Use the Comment section for any notes that you wish to make. When a STUDENT ENVELOPE is returned during the project tryout or at the end of the tryout, record the date in the space provided. Use additional copies of this page as necessary.

[illegible]

GRF REPORT NO. 6
1/79

Page 1 of 4

Introduction

The purpose of this chapter is to illustrate the project reports that school personnel and students will complete as they use the Project Resource File. Each report, an explanation of its purpose, and the directions for completing the report are presented. These reports are listed below in the order they will be completed:

TEACHER NOTES REPORT NO. 1

PRIOR EXPERIENCES REPORT NO. 2

TEACHER FEEDBACK REPORT NO. 3

STUDENT FEEDBACK REPORT NO. 4

SUMMARY COMMENTS REPORT NO. 5

MEDIA SPECIALIST FEEDBACK REPORT NO. 6

The TEACHER CHECKLIST, illustrated on page 16 is not a project report. It outlines the steps a teacher follows when using the Project Resource File.

RESOURCE SURVEY

Completed by: Resource Person

Purpose: Describe services provided to students prior to the project tryout

Distribution: Gifted Science Project

CONTACT _____

Directions: Please answer the following questions. Return this report to the Gifted Science Project office by using the enclosed stamped envelope. If you have a question about the information requested, call the project office at (301) 279-3500 between 8:30 a.m. and 3:00 p.m.

☐ YES

☐ NO

☐ NOT SURE

1. Did you provide help in science to an individual gifted student, in Grades 3-8, from one of these schools during the 1978 calendar year?

Montgomery County Public Schools

Argyle Junior High
Benjamin Benneker Jr.
Beverly Farms Elementary
Cashell Elementary
Cresthaven Elementary
Cromwell Elementary
Crowsnest Elementary
Hill Creek Towne Elementary

Montgomery County Catholic Schools

Little Flower School

2. If you have used a resource, please describe the resource.

best

3. Describe the resource.

GSP REPORT NO. 7
1/79

RESOURCE PERSON FEEDBACK

Completed by: Resource person

Purpose: Describe the student's experience with a resource

Distribution: Gifted Science Project office

CONTACT _____

Student _____

Resource File No. _____

Teacher _____

School _____

Directions: Our records indicate that the student named above used you as a science resource. Please record the information below. If you need help, please call the Gifted Science Project office at 279-3500 between 8:30 a.m. and 3:00 p.m. The best time to call is between 8:30 a.m. and 12:30 p.m. when part-time clerical staff are present. Your prompt reply will be appreciated. Please return this report by using the enclosed stamped envelope.

I. Student Experiences. Nine types of student experiences are listed below. Mark the boxes for all statements which best describe the student's experiences while he/she worked with you. Briefly describe the experiences you marked.

- ☐ 1. The student received information through conversation, reading, or observation or was provided data.
Description:
- ☐ 2. The student observed objects and/or phenomena.
Description:
- ☐ 3. The student measured objects and/or phenomena.
Description:
- ☐ 4. The student formulated a hypothesis related to a problem.
Description:
- ☐ 5. The student designed procedures for testing a hypothesis.
Description:
- ☐ 6. The student carried out an activity to solve a problem or test a hypothesis.
Description:
- ☐ 7. The student utilized knowledge and/or skills to describe and/or construct a theoretical model.
Description:

GSP REPORT NO. 8
1/79

REPORT CONTINUED ON REVERSE SIDE

Page 1 of 2

Two other reports are associated with the Gifted Science Project. However, these are not completed by the teacher, student, or media specialist. These reports are used to collect data from resource persons outside the school. These are RESOURCE SURVEY REPORT NO. 7 and RESOURCE PERSON FEEDBACK REPORT NO. 8. Both reports will be illustrated and explained on pages 60-65.

TEACHER NOTES

Completed by: Teacher

Purpose: Record information on resource selected

Distribution: Gifted Science Project office and STUDENT ENVELOPE

Directions: See the printed information on the back of the yellow copy.

A. Student _____ Grade _____
(Last) (First) (Middle)

Teacher _____ School _____
(Last) (First) (Middle)

B. Resource File No.: _____ Fiche: _____ Page: _____

CONTACT or TITLE: _____

ADDRESS or AUTHOR: _____

TELEPHONE: _____ HOURS: _____

C. Notes

D. Mark the box of the statement which applies:

☐ The resource will be used by the student. (Complete sections E and F and distribute copies as directed below.)

☐ No attempt was made to use the resource. (File both copies of this report in the STUDENT ENVELOPE and DO NOT send the white copy to the Gifted Science Project office.)

☐ An attempt was made to use the resource. However, it could not be arranged. (Please explain below, then file both copies of this report in the STUDENT ENVELOPE and DO NOT send the white copy to the Gifted Science Project office.)

E. Expected starting date: _____ Estimated completion date: _____

F. Who will work directly with the student?

☐ Teacher

☐ Media specialist

☐ CONTACT shown above

☐ Person other than CONTACT shown above.

Give name _____

☐ Do not know

DISTRIBUTION: White/Gifted Science Project office; Yellow/STUDENT ENVELOPE

GSP REPORT NO. 1

1/79

The TEACHER NOTES REPORT NO. 1

The TEACHER NOTES REPORT NO. 1, a two-part carbon report, is used to complete steps 1-4 of the TEACHER CHECKLIST (page 16). The purpose of TEACHER NOTES REPORT NO. 1 is for the teacher to record and supply information on the use of a resource selected from the Project Resource File. The directions are printed on the back of the yellow copy of the report. A review of the directions is presented below.

- ① Print this information prior to using the Project Resource File.
- ② Copy this information exactly as it appears in the Project Resource File.
- ③ Record notes on telephone conversations, details of how the resource will be used, errors discovered in the resource descriptions, and other memoranda.
- ④ Mark the appropriate box to indicate whether the resource will be used.
- ⑤ Record the approximate dates the resource will be used.
- ⑥ Mark the appropriate box or supply the name of the person who will work directly with the student. (This information is important since the project staff must ask this person to complete RESOURCE PERSON FEEDBACK REPORT NO. 8.)

Distribute the copies as shown below:

- ⑦ If the first box in D was marked, send the white copy to the Gifted Science Project Office and file the yellow copy in the STUDENT ENVELOPE.

If a box other than the first box in D was marked, file both the white and yellow copies in the STUDENT ENVELOPE.

PRIOR EXPERIENCES

Completed by: Teacher

Purpose: Identify student's prior science experiences

Distribution: Gifted Science Project office and STUDENT ENVELOPE

Directions: See the printed information on the back of the yellow copy.

Student 1 Grade _____ Report Date _____
Teacher _____ School _____

Number of
Experiences

Resource Category

3 Description

2

1. Activity:

2. Award or Competition:

3. Career Information:

4. Course, Lecture, or Seminar:

5. Library:

6. Mentor:

7. Project Ideas:

8. Science Processes:

9. Visit:

4

Other Science Activities

☐ (a) The student did not participate in any of the science activities listed above.

OR

☐ (b) The student participated in a science activity other than those described above. Description:

5

DISTRIBUTION: White/Gifted Science Project; Yellow/STUDENT ENVELOPE

The PRIOR EXPERIENCES REPORT NO. 2

The purpose of this report is to identify the student's prior science experiences. The report will contain data on the nature of the student's science activities during the 1978 calendar year and will be completed only once for each student who uses the Project Resource File. (See the TEACHER CHECKLIST, step 5, page 16.)

This report is printed on two-part carbon paper. It should be completed by the teacher for each student who uses a resource from the Project Resource File.

The Directions and Resource Category descriptions are printed on the back of the yellow copy. They are reproduced on the next page. The Directions are reviewed below.

- ① Print the requested information.
- ② Record the number of different experiences the student had for each resource category which applies.
- ③ Write a brief description of the student's experience(s).
- ④ Mark either box (a) or box (b), if applicable.
- ⑤ Send the white copy of this report to the Gifted Science Project office by using an addressed envelope found in the STUDENT ENVELOPE. File the yellow copy in the STUDENT ENVELOPE.

PRIOR EXPERIENCES

Purpose: This report will be used by a teacher to provide information on the nature of the student's science experiences during the 1978 calendar year.

Directions:

1. Read the resource category descriptions below.
2. Interview the student and identify the types of resources he/she experienced during the period January 1, 1978 to December 31, 1978, which is prior to the project tryouts. Write the number of different experiences the student had for each resource category which applies. Briefly describe the experiences.
3. Use a return addressed envelope, found in the STUDENT ENVELOPE, to send the white copy to the Gifted Science Project office. File the yellow copy in the STUDENT ENVELOPE.

2

Resource Category Descriptions

1. Activity. On an individual basis, the student met with a science resource person and completed a science activity.
2. Award or Competition. The student participated in an activity or competition for an award or other recognition by developing and presenting a science project or paper.
3. Career Information. On an individual basis, the student conversed with a resource person or read published material which described science or science-related jobs and/or careers.
4. Course, Lecture, or Seminar. The student attended a specialized science course, lecture, or seminar.
5. Library. On an individual basis, the student used a specialized library to locate science information.
6. Mentor. On an individual basis, the student met with a scientist or other science resource person to discuss a science topic. The resource person might have suggested additional readings, resources, and/or ideas for further work.
7. Project Ideas. On an individual basis, the student used published material to do an individualized science project. The published material was used for independent study or in conjunction with a resource person.
8. Science Processes. On an individual basis, the student used published material to develop skills and processes of science. These could have included laboratory skills; suggestions for science problem solving; and discussions concerning the collection, processing, analysis, and presentation of data.
9. Visit. On an individual basis, the student toured a science or science-related facility. This could have included a personalized tour led by a resource person to observe activities and/or procedures not normally available to the public.

DISTRIBUTION: White/Gifted Science Project; Yellow/STUDENT ENVELOPE

The Directions ① and Resource Categories ② for the PRIOR EXPERIENCES REPORT NO. 2 are printed on the back of the yellow copy.

The teacher should use the Resource Category Descriptions to classify the student's prior science experiences.

TEACHER FEEDBACK

Completed by: Teacher

Purpose: Describe the student's experience with a resource

Distribution: Gifted Science Project office

Student _____ Resource File No. _____

Teacher _____ School _____

Resource _____

Directions: Our records indicate that the student named above used a Gifted Science Project (GSP) resource. Please interview the student and record the information below. If you need help, call the GSP office at 279-3500 between 8:30 a.m. and 5:00 p.m. The best time to call is between 8:30 a.m. and 12:30 p.m. when part-time clerical staff are present. Return this report within two days by using the enclosed, addressed, return envelope.

I. Student Experiences. Nine types of student experiences are listed below. Interview the student and mark the boxes for *all* statements which *best* describe his/her experiences while he/she used the resource. Briefly describe the experiences you marked.

- ☐ 1. The student received information through reading or observation or was provided data.

Description:

- ☐ 2. The student observed objects and/or phenomena.

Description:

- ☐ 3. The student measured objects and/or phenomena.

Description:

- ☐ 4. The student formulated a hypothesis related to a problem.

Description:

- ☐ 5. The student designed procedures for testing a hypothesis.

Description:

- ☐ 6. The student carried out an activity to solve a problem or test a hypothesis.

Description:

- ☐ 7. The student utilized knowledge and/or skills to describe and/or construct a theoretical model.

Description:

- ☐ 8. The student applied newly acquired scientific knowledge to other problems.

Description:

- ☐ 9. The student developed and/or used manual skills.

Description:

The TEACHER FEEDBACK REPORT NO. 3

The purpose of TEACHER FEEDBACK REPORT NO. 3 is for the teacher to describe the student's experience with a resource. (See the TEACHER CHECKLIST, step 6, page 16.)

A TEACHER FEEDBACK REPORT NO. 3 will be completed by a teacher when the student does not work directly with a resource person. A copy of the report and an addressed return envelope will be sent to the teacher from the project office based on information the project staff receives from the TEACHER NOTES REPORT NO. 1.

The first page of TEACHER FEEDBACK REPORT NO. 3 is illustrated. The second page continues on page 44.

- ① This information will be completed by the project staff before the report is sent to the teacher.
- ② The teacher should interview the student and mark the boxes of the statements which best describe the student's experiences.
- ③ For each statement marked, the teacher should write a description of the student's experience with the resource.

1

TEACHER FEEDBACK

II. Supplementary Information. Please respond to the items below.

☐ YES

☐ NO

☐ UNCERTAIN

1. (a) Have you observed a change in science attitude, interest, motivation, or other behaviors, stated or demonstrated by the student, which you feel was directly related to his/her involvement with the resource?

(b) Describe your observations of this change and add comments you feel would help to describe the change.

3

2. State any difficulty the student encountered in using the resource.

4

3. Use this space for additional comments you wish to make.

① The back of the TEACHER FEEDBACK REPORT NO. 3 contains items which request Supplementary Information. This information includes observed changes in the student's science attitude ②, difficulties the student encountered in using the resource ③, and additional information ④ .

STUDENT FEEDBACK

Completed by: Student
 Purpose: Describe the student's experience with the resource
 Distribution: Gifted Science Project office

Student _____ Resource File No. _____
 Teacher 1 School _____
 Resource _____

TO THE STUDENT: We want to know what you did with the science resource you used and how you liked it. Please help us by answering these questions. Read the directions carefully since each part asks you to do different things. *If you need help or do not understand you are to do, ask your teacher for help.* When you have finished answering the questions, give this report to your teacher.

Part I Directions: The questions in this part refer to the science resource you used. Answer each question by putting an X in one of the boxes. If you can't decide on a YES or NO answer, then put an X in the box NOT SURE.

	YES	NOT SURE	NO
1. Did you learn something new about how scientists work?			
2. Did this science resource help you?			
3. Would you like to use this science resource again?			
4. Would you like to learn more about this topic using a different science resource?			
5. a. Did you use a resource like this last year?			

	ON MY OWN	WITH OTHERS
b. If your answer is YES, mark whether it was on your own or with other students.		

Part II Directions: The sentences in this part refer to your use of the science resource. Put an X in the space which best describes your experiences.

	A LOT	SOME	NOT SURE	VERY LITTLE	ALMOST NONE
6. I learned new things.					
7. This resource made me want to learn more about the science topic I studied.					
8. I liked this science resource.					

THERE ARE MORE QUESTIONS ON THE OTHER SIDE

The STUDENT FEEDBACK REPORT NO. 4

The purpose of STUDENT FEEDBACK REPORT NO. 4 is for the student to provide information on his or her experiences with a resource.

A STUDENT FEEDBACK REPORT NO. 4 will be sent to a teacher. The data from TEACHER NOTES REPORT NO. 1 is used by the project staff to determine when to send the report. The teacher will give the report to the student to complete. The teacher will return the completed report to the Gifted Science Project by using an addressed envelope supplied.

The first page of STUDENT FEEDBACK REPORT NO. 4 is shown. The second page of the report and its description continues on pages 48-49.

- ① This portion of the report will be completed by the project staff before the report is sent to the teacher.
- ② The student will answer the questions in Part I and Part II by marking the appropriate box for each item.

1

STUDENT FEEDBACK

Part III Directions: Write your answer to each question in the space below it.

8. What kinds of things did you do when you used this science resource?
9. If the science resource helped you, tell us how it helped you.
10. If the science resource did NOT help you, tell us why it did not.
11. What did you like about this science resource?
12. What did you NOT like about this science resource?
13. What other type of science help would you like to have?

2

AS SOON AS YOU HAVE FINISHED, GIVE THIS REPORT TO YOUR TEACHER

① The reverse side of STUDENT FEEDBACK REPORT NO. 4 contains six questions for the student to answer.

② The student is directed to return the completed report to his or her teacher.

SUMMARY COMMENTS

Completed by: Teacher

Purpose: Describe the teacher's satisfaction with the Project

Distribution: Gifted Science Project office

Teacher _____ School _____

Directions: This report contains two parts. Please respond candidly and thoroughly. Return the completed report within two days by using the enclosed, addressed envelope.

Part I Directions: Put an X in the box under the column which best describes your level of agreement with each statement. You can elaborate on your answers in Part II of this report.

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1. I was adequately informed of the purpose of the Project Resource File before using it.					
2. The IN-SERVICE MANUAL helped me use the Project Resource File.					
3. The IN-SERVICE MANUAL helped me complete the necessary project reports.					
4. The project helped me meet the needs of my gifted science pupils.					

Part II Directions: Please mark the box of your choice for number 5 and write a brief statement for items 6 and 7.

5. Resources in the Project Resource File can be located by grade level, followed by topics for each grade level, followed by resource categories for each topic. The items are alphabetized within each topic and category. They are not alphabetized by objective, however, the objective number is on each item in the Project Resource File.

Mark the box of your choice.

- ☐ (a) This arrangement is satisfactory and should not be changed.
☐ (b) An alternative system should be used. (Please explain below.)

6. List the things you like about the project.

7. State your concerns or suggestions.

The SUMMARY COMMENTS REPORT NO. 5

The purpose of SUMMARY COMMENTS REPORT NO. 5 is for the teacher to describe his or her satisfaction with the project. (See the TEACHER CHECKLIST, footnote, page 16.)

A SUMMARY COMMENTS REPORT NO. 5 will be sent to a teacher at the conclusion of the tryout period. The teacher will return the report using the addressed envelope supplied.

MEDIA SPECIALIST FEEDBACK

Completed by: Media Specialist

Purpose: Describe use of and recommendations for improving the project products and services

Distribution: Gifted Science Project office

Media Specialist _____ School _____

This report will provide an anecdotal record of the use of the Project Resource File in your school.

1

I. STUDENT ENVELOPE Log

Directions: Each time a teacher is issued a STUDENT ENVELOPE, record the information below. Use the Comment section for any notes that you wish to make. When a STUDENT ENVELOPE is returned during the project tryout or at the end of the tryout, record the date in the space provided. Use additional copies of this page as necessary.

[illegible]

The MEDIA SPECIALIST FEEDBACK REPORT NO. 6

The purpose of the MEDIA SPECIALIST FEEDBACK REPORT NO. 6 is for the school media specialist to describe the use of and recommendations for improving the Project Resource File. It will contain anecdotal information on the use of the Project Resource File.

A copy of this report will be given to each pilot school media specialist when the Project Resource File is installed in the school. The media specialist will periodically update the information requested. The report will be returned to the project office at the conclusion of the tryout period.

This report contains four sections, which appear on pages 54, 56, and 58. Section I, STUDENT ENVELOPE Log, is illustrated.

- ① The STUDENT ENVELOPE Log will be a record of each STUDENT ENVELOPE issued.
- ② When a teacher is issued a STUDENT ENVELOPE, record the teacher's name.
- ③ Record the student's name.
- ④ Record the date the envelope was issued.
- ⑤ Record the date the envelope was returned.
- ⑥ Use this space for additional comments.

MEDIA SPECIALIST FEEDBACK

II. Revision and Deletion Recommendations

Directions: If you feel that an item in the Project Resource File which describes published material should be revised or deleted, record the information in the chart below. Use additional copies of this page as necessary.

[illegible]

Section II, Revision and Deletion Recommendations, is for the media specialist to recommend revisions to and deletion of resources in the Project Resource File. These data will be used to revise the Project Resource File before the project is completed.

- ① Write the Resource File No.
- ② Check the column which applies.
- ③ Write a concise reason for the recommended change.

MEDIA SPECIALIST FEEDBACK

III. Desirable Additions to the School Collection

Directions: Published materials in the Project Resource File might not be part of your school's collection. If you received a request for an item you feel would be a desirable addition to your collection, list its Resource File No. in one of the spaces below.

1.	21.	41.	61.	81.
2.	22.	42.	62.	82.
3.	23.	43.	63.	83.
4.	24.	44.	64.	84.
5.	25.	45.	65.	85.
6.	26.	46.	66.	86.
7.	27.	47.	67.	87.
8.	28.	48.	68.	88.
9.	29.	49.	69.	89.
10.	30.	50.	70.	90.
11.	31.	51.	71.	91.
12.	32.	52.	72.	92.
13.	33.	53.	73.	93.
14.	34.	54.	74.	94.
15.	35.	55.	75.	95.
16.	36.	56.	76.	96.
17.	37.	57.	77.	97.
18.	38.	58.	78.	98.
19.	39.	59.	79.	99.
20.	40.	60.	80.	100.

Section III, Desirable Additions to the School Collection, will be a record of materials desired by the tryout school staff for their school's collection.

If published materials are identified in the Project Resource File that should be added to the school collection, the teacher should share this information with the media specialist. The school media specialist should record the resource file number for each resource. These data will be useful for the project staff to recommend budget support for all schools.

MEDIA SPECIALIST FEEDBACK

IV. Additional Information

Directions: Write your answers in the space provided.

1. Have you had requests from media specialists from other pilot schools to share published materials, identified in the Project Resource File?

- ☐ YES Estimate the number of requests _____
☐ NO

2. Have you requested other media specialists to share published materials from their collection which were identified in the Project Resource File?

- ☐ YES Estimate the number of requests _____
☐ NO

3. Use the space below to identify resources (published or other) which you, teachers, or gifted science students have found helpful and which are not now listed in the Project Resource File. (Add additional sheets as necessary).

4. Resources in the Project Resource File can be located by grade level, followed by topics for each grade level, followed by resource categories for each topic. The items are alphabetized within each topic and category. They are not alphabetized by objective, however, the objective number is on each item in the Project Resource File.

Mark the box of your choice.

- ☐ (a) This arrangement is satisfactory and should not be changed.
☐ (b) I recommend an alternative system be used. Please explain below.

5. List your concerns or suggestions for using the Project Resource File. (Add additional sheets as necessary.)

Section IV, Additional Information, will be used to record notes and suggestions for improving project services.

RESOURCE SURVEY

Completed by: Resource Person

Purpose: Describe services provided to students prior to the project tryout

Distribution: Gifted Science Project

CONTACT _____

Directions: Please answer the following questions. Return this report to the Gifted Science Project office by using the enclosed stamped envelope. If you have a question about the information requested, call the project office at (301) 279-3500 between 8:30 a.m. and 5:00 p.m.

- ☐ YES 1. Did you provide help in science to an individual gifted student, in Grades 3-8, from one of these schools during the 1978 calendar year?
- ☐ NO
- ☐ NOT SURE

Montgomery County Public Schools

Argyle Junior High School	(7-8)	Piney Branch Elementary School	(4-6)
Benjamin Banneker Junior High School	(7-8)	Potomac Elementary School	(3-6)
Beverly Farms Elementary School	(3-6)	Ridgeview Junior High School	(7-8)
Cashell Elementary School	(3-6)	Tilden Junior High School	(7-8)
Cresthaven Elementary School	(3-6)	Westbrook Elementary School	(3-6)
Germantown Elementary School	(3-6)	Western Junior High School	(7-8)
Grosvenor Elementary School	(3-6)	Whetstone Elementary School	(3-6)
Mill Creek Towne Elementary School	(3-6)		

Montgomery County Catholic School

Little Flower School (3-8)

- _____ 2. If you answered YES above, indicate in the space the total number of students you helped on an individual basis. Give us your best estimate.
3. Describe below the science assistance or service you provided.

The RESOURCE SURVEY REPORT NO. 7

This report, and the RESOURCE PERSON FEEDBACK REPORT NO. 8, are used to collect data from resource persons outside the school. These reports are not completed by the teacher, student, or media specialist.

The purpose of RESOURCE SURVEY REPORT NO. 7 is to obtain information regarding the services provided to gifted students by a resource person prior to the project tryout. Selected resource persons will be asked to complete this report.

RESOURCE PERSON FEEDBACK

Completed by: Resource person

Purpose: Describe the student's experience with a resource

Distribution: Gifted Science Project office

CONTACT _____

Student _____ Resource File No. _____

Teacher _____ School _____

Directions: Our records indicate that the student named above used you as a science resource. Please record the information below. If you need help, please call the Gifted Science Project office at 279-3500 between 8:30 a.m. and 5:00 p.m. The best time to call is between 8:30 a.m. and 12:30 p.m. when part-time clerical staff are present. Your prompt reply will be appreciated. Please return this report by using the enclosed stamped envelope.

I. Student Experiences. Nine types of student experiences are listed below. Mark the boxes for all statements which best describe the student's experiences while he/she worked with you. Briefly describe the experiences you marked.

- ☐ 1. The student received information through conversation, reading, or observation or was provided data.
Description:
- ☐ 2. The student observed objects and/or phenomena.
Description:
- ☐ 3. The student measured objects and/or phenomena.
Description:
- ☐ 4. The student formulated a hypothesis related to a problem.
Description:
- ☐ 5. The student designed procedures for testing a hypothesis.
Description:
- ☐ 6. The student carried out an activity to solve a problem or test a hypothesis.
Description:
- ☐ 7. The student utilized knowledge and/or skills to describe and/or construct a theoretical model.
Description:

The RESOURCE PERSON FEEDBACK REPORT NO. 8

The purpose of this report is to obtain information regarding a student's experience with a resource person. This two-page report will be completed by each resource person who helps a student. The project office staff sends the report to the resource person, based on information received from the TEACHER NOTES REPORT NO. 1.

RESOURCE PERSON FEEDBACK

☐ 8. The student applied newly acquired scientific knowledge to other problems.
Description:

☐ 9. The student developed and/or used manual skills.
Description:

II. Supplementary Information. Please respond to the items below.

☐ YES

1. (a) Have you observed a change in science attitude, interest, motivation, or other behavior, stated or demonstrated by the student, which you feel was directly related to his/her involvement with you?

☐ NO

☐ UNCERTAIN

(b) Describe your observations of this change and add comments you feel would help to describe the change.

2. Check the applicable box(es). How did the student communicate with you?

☐ Visited you at work

☐ Visited you at home

☐ Communicated by telephone

☐ Communicated in writing

☐ Communicated in some other way (Please explain)

3. _____ In the space to the left, state the total time to the nearest half-hour you spent helping this student (include telephone and written communications, and your planning time).

☐ YES

☐ NO

☐ UNCERTAIN

4. Were you adequately informed by the project staff regarding the project objectives and the procedures for your participation? (If NO, please explain below.)

5. Use this space for additional comments you wish to make.

This is the back of the RESOURCE PERSON FEEDBACK REPORT NO. 8.
It continues with questions about the student's work with the resource
person and the services of the project staff.

APPENDIX B contains samples
of letters used in the project.

APPENDIX B

SAMPLE PROJECT LETTERS



GIFTED SCIENCE PROJECT

Department of Instructional Planning and Development
850 Hungerford Drive Rockville, Maryland 20850
Telephone (301) 279-3500

----- (Date)

----- (Principal)
----- (School)

Dear -----:

We appreciate your willingness to have your faculty be part of the Gifted Science Project tryout. We are now ready to begin the tryout in your school.

We are delivering to your media specialist the project materials your staff will need for the second half of the tryout period. This package includes the Project Resource File (microfiche collection), a supply of project reports and envelopes, and one copy of the in-service manual. A new in-service manual is being printed and as soon as copies are ready, the project staff will provide copies for each teacher who could use the Project Resource File.

The Project Resource File is now ready for use. If you or your staff have any questions regarding the project or tryout period, or you need additional assistance, please call the project office at 279-3500.

Your cooperation with us for the tryout is appreciated.

Sincerely,

John R. Pancella
Coordinator, Secondary Science
and Project Director

JRP:tb

Enclosures

Copy to:
Media Specialist

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This letter announces the delivery of the Project Resource File, project reports, and the in-service manual to each tryout school.



GIFTED SCIENCE PROJECT

Department of Instructional Planning and Development
850 Hungerford Drive Rockville, Maryland 20850
Telephone (301) 279-3500

____ (Date)

Reference

Student: _____

Resource File No.: _____

Dear _____:

Information that you sent to us indicates that the student named above used a resource obtained through the Gifted Science Project Resource File.

Enclosed are two reports:

TEACHER FEEDBACK REPORT NO. 3. This report should be completed by you. Please help us fulfill our obligation to evaluate the project by interviewing your student after s/he finishes using the resource. Use the report as a guide for interviewing the student.

STUDENT FEEDBACK REPORT NO. 4. Please have the student complete this report. If necessary, please help the student complete the information accurately.

If you need help in completing either of these reports, call the project office at 279-3500 between 8:30 a.m. and 5:00 p.m. Please return the completed reports within a week by using the enclosed addressed envelope.

The data you provide will be recorded and reported anonymously. A copy of our final evaluation report will be sent to your school.

Thank you.

Sincerely,

John R. Pancella
Coordinator, Secondary Science
and Project Director

JRP/p

Enclosures

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This letter is sent with TEACHER FEEDBACK REPORT NO. 3 and STUDENT FEEDBACK REPORT NO. 4 to teachers. REPORT NO. 3 is used to obtain information from the teacher on a student's involvement with a resource. REPORT NO. 4 is used to obtain information from the student on his or her use of the resource.



GIFTED SCIENCE PROJECT

Department of Instructional Planning and Development
850 Hungerford Drive Rockville, Maryland 20850
Telephone (301) 279-3500

----- (Date)

Reference

Student: -----

Resource File No.: -----

----- (Teacher)

----- (School)

Dear -----:

Information that you sent us indicates that the student named above used a resource obtained through the Gifted Science Project Resource File. We have enclosed a STUDENT FEEDBACK REPORT NO. 4 and ask that you have the student complete it. If necessary, please help the student complete the information accurately. This information will help us fulfill our obligation to evaluate the project.

Please return the completed report within a week by using the enclosed addressed envelope.

The data provided will be recorded and reported anonymously. Your cooperation during this phase of the project tryout is appreciated. A copy of our final evaluation report will be sent to your school.

Sincerely,

John R. Pancella
Coordinator, Secondary Science
and Project Director

JRP/p

Enclosures

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This letter is sent with STUDENT FEEDBACK REPORT NO. 4 to the teacher of a student who has used a resource in the Project Resource File. The teacher is asked to give the report to the student to complete. The teacher returns it to the project office.



GIFTED SCIENCE PROJECT
Department of Instructional Planning and Development
850 Hungerford Drive Rockville, Maryland 20850
Telephone (301) 279-3500

----- (Date)

Dear -----:

We are collecting information from teachers who have used the project's resources. This information will help us complete our obligation to evaluate the project as well as improve the project's management and services.

Please complete the enclosed SUMMARY COMMENTS REPORT NO. 5 and return it within the next day by using the enclosed, addressed envelope. The data you provide will be recorded and reported anonymously.

A copy of our final evaluation report will be sent to your school.
Thank you for your cooperation.

Sincerely,

John R. Pancella
Coordinator, Secondary Science
and Project Director

JRP:tb

Enclosure

This letter is sent with SUMMARY COMMENTS REPORT NO. 5
at the end of the tryout period to teachers who have used the
Project Resource File.



GIFTED SCIENCE PROJECT
Department of Instructional Planning and Development
850 Hungerford Drive Rockville, Maryland 20850
Telephone (301) 279-3500

----- (Date)

Dear -----:

We want to thank you for consenting to serve as one of our project resources.

A copy of INFORMATION FOR A PROJECT RESOURCE PERSON is enclosed. This is to acquaint you with the Gifted Science Project objectives and procedures. Please keep this information sheet for future reference.

Also enclosed is the list of objectives that you have agreed to support and two copies of the information sheet(s) which show how your contribution will be described to the 16 schools in our tryout study. One copy is for your files and the other is to be reviewed and returned to us. Please read the information sheet(s) and make corrections, if any. If there are no corrections, verify this for us by writing your initials at the top of the sheet(s).

In order to satisfy our obligation to evaluate the project, we need some additional information. Enclosed is a RESOURCE SURVEY to describe the services you provided to gifted science students prior to the project tryout. Please complete this report to help us meet the objectives for our federal-state grant.

Use the enclosed stamped envelope to return the accepted or corrected information sheet(s) and the RESOURCE SURVEY.

We are asking that your information reach us within two weeks of your receipt of this letter. If you have any questions on this, or questions or concerns about your participation, please call us at 279-3500.

Thank you for helping to support our project. Your contribution is important to us.

Sincerely,

John R. Pancella
Coordinator, Secondary Science
and Project Director

JRP/tb

Enclosures

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This letter is sent to resource persons with a RESOURCE SURVEY REPORT NO. 7, two copies of the person's information sheet as it will appear in the Project Resource File, and an information sheet on the project.



GIFTED SCIENCE PROJECT

Department of Instructional Planning and Development
850 Hungerford Drive Rockville, Maryland 20850
Telephone (301) 279-3500

----- (Date)

Reference

Student: -----
School: -----
Teacher: -----
Resource File No.: -----

Dear -----:

Thank you for assisting the science student named above. We appreciate your contributions of time and professional expertise.

Enclosed is a copy of RESOURCE FEEDBACK REPORT NO. 8 which we now need completed by you. This information will help us fulfill our obligation to evaluate the project.

Please complete the report and return it within a week using the enclosed addressed envelope.

The data you provide will be recorded and reported anonymously. We will send you a summary of our final evaluation report.

We hope that this has been an enjoyable experience, and that you will continue to serve as a resource person for our project.

Sincerely,

John R. Pancella
Coordinator, Secondary Science
and Project Director

JRP/p

Enclosures

This letter is sent with RESOURCE PERSON FEEDBACK REPORT NO. 8 to a resource person who has helped a student in the project. The purpose of this report is to obtain information on a student's activities while the student worked with the resource person.



GIFTED SCIENCE PROJECT

Department of Instructional Planning and Development
850 Hungerford Drive Rockville, Maryland 20850
Telephone (301) 279-3500

----- (Date)

Re: -----(Student) -----(School)
----- (Teacher) -----(Resource File No.)

Dear -----:

A letter and a RESOURCE PERSON FEEDBACK REPORT NO. 8 were recently sent to you. We have not yet received your completed report for the student named above.

Perhaps you have returned the report or are in the process of completing it. The information you provide will contribute to improved project management and services and will help us fulfill our obligation to evaluate the project.

In the event that our letter did not reach you, or if it has been misplaced, we have enclosed a duplicate report and a stamped, addressed envelope. We hope you will take a few minutes to complete and return it within the next day.

Your continued cooperation and support will be appreciated. A summary of our final evaluation report will be sent to you.

Sincerely,

John R. Pancella
Coordinator, Secondary Science
and Project Director

JRP:tb

Enclosures

This follow-up letter is sent with a second copy of RESOURCE PERSON FEEDBACK REPORT NO. 8 to resource persons when the original report is not received by the project office.



GIFTED SCIENCE PROJECT

Department of Instructional Planning and Development
850 Hungerford Drive Rockville, Maryland 20850
Telephone (301) 279-3500

----- (Date)

Re: ----- (Name of Report)
----- (Teacher or resource person)

Dear -----:

The second half of the Gifted Science Project's tryout year will end soon. We are obligated to evaluate our project. You should have recently received a copy of the report noted above and a letter requesting that you complete and return it to us.

Perhaps you have returned the report or are in the process of completing it. The information you provide will contribute to improved project management and services and will help us fulfill our obligation to evaluate the project.

In the event that our letter did not reach you, or if it has been misplaced, we have enclosed a duplicate report and a stamped, addressed envelope. We hope you will take a few minutes to complete and return it within the next day.

We appreciate your participation in our project and we look forward to your reply.

Sincerely,

John R. Pancella
Coordinator, Secondary Science
and Project Director

JRP:tb

Enclosures

This letter is sent with a duplicate copy of a project report to a resource person or a teacher when an original report is not received by the project office.

Dr. John R. Pancelli
Gifted Science Project, Rm. 259
Educational Services Center

(MCPS Pony Mail)

• 1001 Hungerford Drive • Rockville, Maryland • 20850 •



Dr. John R. Pancelli
Gifted Science Project, Rm. 259
Montgomery County Public Schools
Rockville, MD 20850

The top address format is on addressed return envelopes used for all correspondence between MCPS schools and the Gifted Science Project office. The PONY mail is used for this delivery. The school media specialist has a supply of these envelopes.

The bottom envelope is for all project correspondence to be returned from persons outside MCPS. A stamp is included on the addressed return envelope.